

14. *Opegrapha Duricæi*, Mont. Nyl.*O. calcarea*, Rbh. Exs. Rbh. 22!

Thallus sat tenuis, linea nigra determinatus, superficie amylaceus vel cretaceus albus. Apothecia innata, dispersa, simplicia vel varie ramosa, late linearia (1-1.5 millim. longa, 0.25 millim. lata); epithecio albo-suffuso, rimiformi. Hymenium (100 mik. altum) in hypothecio fere incolori e paraphysibus liberis et ascis clavatis (70 mik. longis, 18 mik. latis) compositum. Sporæ 8<sup>næ</sup>, elongato-ellipsoideæ vel late clavi- vel fusiformes, 3-septatæ, hyalinæ (20-26 mik. longæ, 6-8 mik. crassæ). Hymenium tinctura iodii vinose rubens. Spermata cylindrica, recta, vel leviter curvula (5-6 mik. longa, 1 mik. lata).

Ad rupes calcareas Algeriæ nec non insularum maris Adriatici.

C. Species saxicolæ, sporis 2-ocularibus.

15. *Opegrapha Elisæ*, Mass.*Encephalographa*, Id. Symm. 66. Exs. Anzi, Venet. 108.

Thallus linea nigra determinatus, tenuissimus, e viridi flavo-cinereus. Apothecia linearia, primum solitaria, nonnihil immersa, denique sessilia et acervulos contortos formantia, margine rotundato, epithecio rimiformi. Hymenium hyalinum, superne denigratum, in hypothecio nigro, e paraphysibus gracillimis coalitis et ascis late claviformibus (40 mik. longis, 16 mik. latis) compositum. Sporæ 8<sup>næ</sup>, ellipticæ vel ovales, 1-septatæ, olivaceæ (12-14 mik. longæ, 6-7 mik. crassæ).

Ad rupes dolomiticas Italiæ superioris.

16. *Opegrapha aphoristica*, Nyl.

In lit., descriptione ampliori non addita.

Ad rupes insularum Canariensium (non vidi).

XLVIII.—*Observations on the "Prodrome of a Monograph of the Pinnipedes, by Theodore Gill."* By Dr. J. E. GRAY, F.R.S., V.P.Z.S.

IN the fifth volume of the 'Proceedings of the Essex Institute,' published on the 7th of April, 1866, Mr. Theodore Gill has published a "Prodrome of a Monograph of the Pinnipedes." He states that it is founded on the examination of the skins, skulls, and skeletons possessed by the Smithsonian Institution, the Academy of Natural Sciences of Philadelphia, the museum of the Essex Institute, and of Professor Wyman. It may be observed that the "Prodrome" founded on the examination of these museums does not furnish the author with a single species that has not been described in Europe; and the author informs us that they did not afford him any specimens of several well-known genera, as *Monachus*, *Lobodon*, *Leptonyx*, *Ommatophoca*,

as is recorded in page 8. And it is evident also that the author has not seen the American genus *Halicyon*; for he refers it to the genus *Phoca*, as "*Gill ex Gray*." Indeed, as far as this paper is concerned, the author need not have consulted any specimens whatever, as almost all the characters he gives are to be found in published papers which have chiefly appeared in the 'Proceedings of the Zoological Society of London.'

This absence of new matter is more extraordinary, as there are several Seals noticed and imperfectly described in American voyages and travels which seem, from the short account given of them and from their habitats, to be very probably distinct from those known in Europe.

In the Appendix to the "Prodrome," there is a list of the Pinnipedes of California, Oregon, &c.; and in it Mr. Gill mentions "*Macrorhinus angustirostris*, Gill, California," observing, in a note, "It is distinguished by its narrow snout and the form of the palatine bones, &c. It will be described in the Proc. Chicago Acad. Sc." But he takes no notice of it in the "Prodrome of the Monograph." A Sea-Elephant from the North Pacific is very probably a distinct species, and certainly was worthy of being more fully described.

This is not the only species that is left out of the "Prodrome." No notice is taken, for example, of the *Phoca Largha* of Pallas, from Japan, or of the Australian Eared Seals *A. lobatus*, *A. cinereus*, and *A. australis*; and he even does not include the two Seals from Jamaica, viz. *Cystophora Antillarum* and *Phoca tropicalis*, and only mentions them, in a note, as if they were a single species—saying, "Its West-Indian habitat requires confirmation," overlooking the fact that they were both collected in Jamaica, and sent home direct from the island, by Mr. Gosse.

As the author has nothing new to describe, or, at least, refers all the materials at his command to well-known species, he proceeds to change the names which have been applied to well-established genera (always a great evil to science); but it is a change that any tyro in natural science, however little acquainted he may be with a group, can easily make, and find an excuse for so doing.

Naturalists have generally agreed that the twelfth edition of Linnæus's 'Systema Natura' is to be regarded as the standard of the Linnean nomenclature; but Mr. Gill says "the tenth edition, of 1750, the first in which the binominal system was introduced," is the standard; and thus he finds an excuse for changing the type used for the genera *Phoca* and *Trichechus*, and this gives him the opportunity of applying the name *Erignathus* to the genus *Phoca* as defined by F. Cuvier. In the

same manner Mr. Gill says F. Cuvier quoted *Phoca ursina* as the type of the genus *Arctocephalus*, and therefore that generic name must be retained for the true *Phoca ursina*—overlooking the fact that the skull figured and described by F. Cuvier as the type of his genus is not that of the *Phoca ursina* of Behring's Straits, to which Mr. Gill wishes to attach it, the fact being that until lately almost all the sea-bears or *Arctocephali* were called *P. ursina*. This allows Mr. Gill to give the name of *Eumetopias* to the *Arctocephali* of F. Cuvier, and *Arctocephalus* to the genus which I defined as *Callorhinus*.

In the 'Proceedings of the Zoological Society,' when describing the skulls of the sea-bears in the British Museum, I divided a genus into sections according to the form of the palate. Mr. Gill has applied to two of these sections the generic names of *Zalophus* and *Halarctus*.

There is one observation of importance in the paper: Mr. Gill observes, "the *Halichærus antarcticus* of Peale, very erroneously identified with *Lobodon carcinophaga* by Dr. J. E. Gray, is a typical species of *Phoca*." But he might have stated that Cassin, in his text to the plates of the Peale Expedition, refers it to *Lobodon carcinophaga* (see p. 25), and that I stated the figure of the skull was "not good" for *Lobodon*, that Peale says it inhabited the *Antarctic Sea*, and that the teeth in the figure of the skull given by Peale and repeated by Cassin are very unlike those of a typical *Phoca*, and somewhat like those of *Lobodon*. On re-reading Peale's description, I think that it is very probably a new genus, more allied to *Phoca* than to *Lobodon*; for he says it has six cutting-teeth in the upper jaw, and that the four posterior molar teeth in both jaws are double-rooted, their crowns many-lobed, the cutting-teeth short, simple, and curved; the whiskers flattened, waved on the edges. To the animal so characterized the generic name of *Haliphilus* may be applied.

Though Mr. Peale distinctly says this Seal inhabits the Antarctic Sea, Mr. Gill observes, it "appears to be identical with a species occurring along the Californian and Oregonian coasts; consequently there must be some error as to its assigned habitat in the Antarctic Sea. I am happy to add that Mr. Peale himself now doubts the correctness of the label on the faith of which he gave its habitat; and as a change of name is desirable, I would propose that of *P. Pealei*." Mr. Peale does not describe the colour of his Seal. Probably the Seal with which Mr. Gill compares it is the *Hair Seal*, figured in Hutching ('Scenes of Wonder and Curiosity in California,' p. 180) as the "*Hair Seal*, *Phoca jubata*" (!), from the Tarallone Islands, the *Halicyon? Californica* of my Catalogue of Seals and Whales in the British Museum, p. 367.